

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

Translation

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

PHDE030431WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/IB2004/051323

International filing date (day/month/year)

29.07.2004

Priority date (day/month/year)

07.08.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant

KONINKLIJKE PHILIPS ELECTRONICS N. V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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| Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----|
| 1. Statement | | | |
| Novelty (N) | Claims | 4, 7, 9, 13-15, 16, 18, 19 | YES |
| | Claims | 1, 2, 3, 5, 6, 8, 10-12, 17 | NO |
| Inventive step (IS) | Claims | 4, 7, 9, 13-15, 16, 18, 19 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-19 | YES |
| | Claims | | NO |
| 2. Citations and explanations: | | | |
| <p>Reference is made to the following document:</p> <p>D1: US 6 576 917 B1 (SILFVAST WILLIAM T) 10 June 2003 (2003-06-10)</p> <p>D2: US-A-6 031 241 (SILFVAST ET AL) 29 February 2000 (2000-02-29)</p> <p>2 INDEPENDENT CLAIM 1</p> <p>2.1</p> <p>The present application does not meet the requirements of PCT Article 33(1), because the subject matter of claim 1 is not novel within the meaning of PCT Article 33(2). Document D1 discloses (the references in parentheses relate to said document):</p> <p>A gas discharge source for generating EUV radiation, in which a gas-filled electrode interspace (the capillary) is located between two electrodes (10, 30), in which there are devices for admitting (5) and pumping out (implicit in view of "low pressure region") gas, and in which an electrode (30) has an opening which defines an axis of symmetry and is intended for the emergence of</p> | | | |

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

radiation, a diaphragm (52), which has at least one opening on the axis of symmetry and acts as a differential pumping stage being present between the two electrodes.

3 DEPENDENT CLAIMS 2, 3, 5, 6, 8, 10-12, 17

Claims 2, 3, 5, 6, 8, 10-12, 17 do not contain any features which, in combination with the features of any claim to which they refer back, meet the PCT requirements for novelty and inventive step.

4 The term "in particular for generating...", in view of the expression "in particular", does not have any restricting effect, since it has to be interpreted as meaning that the following text is optional.

However, the description only discloses sources for EUV and/or soft X-radiation, and consequently the expression "in particular" should be deleted.

5

The disclosure of D1 which is prejudicial to novelty appears to relate to a configuration which deviates from that of the invention.

Based on the available prior art, incorporating the additional feature of claim 9 in claim 1 would appear to make the subject matter of the latter novel and inventive (PCT Article 33(2), (3)), since the capillary in D1 has a diameter of less than 3 mm (cf. document D2, column 3, lines 19-21; D1 refers to D2 with regard to the capillary).

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

See supplemental sheet